

10-minute consultation

MMR immunisation

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This is part of a series of occasional articles on common problems in primary care

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The parents of an only child, aged 13 months, are worried about media reports that the MMR (measles, mumps, and rubella) vaccine causes autism. Their son is due for his vaccination and his cousin has an egg allergy.

What issues you should cover

Evidence—Evidence linking the MMR vaccine and autism is lacking. The number of cases of autism has been increasing since 1979. There has been no sudden increase in the numbers of children diagnosed with autism or Crohn's disease since the MMR vaccine was introduced in the United Kingdom in 1988. Several hundred million doses have been given worldwide. A recently published study in Finland reported no cases of autism associated with three million doses over 14 years.

Diagnosis—Autism is commonly diagnosed after 18 months of age when behavioural and communication characteristics become apparent. It has a genetic component, and associated neurological defects usually start to develop in utero.

Doses—MMR vaccine is given to children twice: at 13 months and at preschool entry. The second dose protects those children whose immunity wanes and the minority who fail to develop immunity after the first dose.

Side effects—Children may experience minor side effects after MMR vaccination: 10% develop fever, malaise, and a rash 5-21 days after the first vaccination; 3% develop arthralgia.

Contagion—Measles is a highly contagious disease. On average every child with measles infects 15 others. If less than 95% of children are immunised, the number of susceptible children in the community rises to a level at which a measles epidemic is certain. This is now the case in the United Kingdom (88%).

Dangers of non-vaccination—Emphasise the potential serious complications of measles (death, pneumonia, deafness, and a slow relentless form of encephalitis), mumps (meningitis, pancreatitis, orchitis) and rubella (congenital rubella syndrome—deafness, blindness, heart problems, and brain damage).

Recent outbreak—Ireland had an outbreak of measles last year, with two deaths in Dublin. Uptake of MMR vaccine in Ireland is 76%.

Family—A relative with a mild egg allergy is not a contraindication to the vaccine. Special vaccination precautions need to be taken only in children with known anaphylactic reactions to egg or coexisting chronic severe asthma.

Single v combined vaccine—No evidence exists of any benefit in using single vaccines. The United States, Canada, and 38 European countries use combined

Useful reading

Department of Health. *Immunisation against infectious disease*. London: HMSO, 1996. (Green book). (No specific information on MMR and autism.)

www.doh.gov.uk/mmr.htm (UK government website, with information about MMR and its relation to autism and inflammatory bowel disease)

vaccine. Single vaccines result in three times more injections, leave the child vulnerable to disease between vaccinations, and increase the chance of the course not being completed. Children's immune systems are designed to cope with exposure to many viruses and bacteria simultaneously.

What you should do

Before the consultation—Know the facts about the diseases and the benefits and risks of immunisation. Have your own children vaccinated—it sends out a powerful message. Ensure that all members of the primary health care team, including non-clinical staff, receive consistent messages and understand vaccination policy.

At the consultation—Listen to parents' concerns and explore what they understand by the vaccine "causing autism." Don't be judgmental or coercive; tell them it is their decision to do what they feel is best for their child. Acknowledge the recent adverse publicity about the MMR vaccine. Answer questions concisely. Elicit any personal experience of autism. Check there were no problems with the child's primary course of vaccinations. Provide current written information to support the MMR vaccination policy. Resist the temptation to refer to an "expert"; general practitioners have sufficient expertise and access to information to manage this consultation in primary care. Maintain your relationship with parents by concluding that their decision will not affect your future care of their family.

After the consultation—Ensure you ask the parents at their son's next visit how he was after the vaccine. Discuss with team members how to maintain or increase uptake of the vaccine.

Information for parents

www.nhsdirect.nhs.uk (basic guide to MMR vaccination)

www.ndsc.ie/measles.htm (includes photograph of measles rash)